

**PCT**WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau

## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>7</sup> :</b> <b>C12N 15/47, A61K 48/00,</b> <b>A61P 31/04, 31/12</b>	<b>A3</b>	<b>(11) International Publication Number:</b> <b>WO 00/24428</b>  <b>(43) International Publication Date:</b> 4 May 2000 (04.05.00)
<b>(21) International Application Number:</b> PCT/US99/24769  <b>(22) International Filing Date:</b> 22 October 1999 (22.10.99)  <b>(30) Priority Data:</b> 60/105,469 23 October 1998 (23.10.98) US 60/122,446 2 March 1999 (02.03.99) US  <b>(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Applications</b> US 60/105,469 (CIP) Filed on 23 October 1998 (23.10.98) US 60/122,446 (CIP) Filed on 2 March 1999 (02.03.99)  <b>(71) Applicant (for all designated States except US):</b> HESKA CORPORATION [US/US]; 1613 Prospect Parkway, Fort Collins, CO 80525 (US).  <b>(72) Inventors; and</b> <b>(75) Inventors/Applicants (for US only):</b> HAYNES, Joel, R. [US/US]; 611 Hinsdale Ct., Fort Collins, CO 80526 (US). WONDERLING, Ramani, S. [US/US]; 5808 Park Ridge Court, Fort Collins, CO 80528 (US). STINCHCOMB, Dan,		T. [US/US]; 8409 South County Road 3, Fort Collins, CO 80528 (US).  <b>(74) Agents:</b> HANLEY, Elizabeth, A. et al.; Lahive & Cockfield, LLP, 28 State Street, Boston, MA 02109 (US).  <b>(81) Designated States:</b> AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i>  <b>(88) Date of publication of the international search report:</b> 6 July 2000 (06.07.00)

**(54) Title:** CATIONIC LIPID-MEDIATED ENHANCEMENT OF NUCLEIC ACID IMMUNIZATION OF CATS**(57) Abstract**

The present invention relates to a method to introduce a nucleic acid molecule into a felid by administration of a nucleic acid-cationic lipid complex composition. The method includes the step of administering to the felid, by a parenteral route, a nucleic acid-cationic lipid complex to elicit and/or enhance an immune response. In one embodiment, this method enhances the immune response in a felid compared to a method in which a naked DNA vaccine is administered to a felid. Also provided is a method to deliver a nucleic acid to a felid. This method comprises parenterally administering to the felid a composition that includes a nucleic acid molecule complexed with a cationic lipid.